



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,965	02/04/2004	Kazuhiko Gogo	14470.22US01	5309
23552	7590	12/21/2004	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			SY, MARIANO ONG	
		ART UNIT		PAPER NUMBER
				3683

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/772,965	GOGO, KAZUHIKO
Examiner	Art Unit	
Mariano Sy	3683	<i>MW</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4 is/are pending in the application.
 - 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1 and 3 is/are rejected.
- 7) Claim(s) 2 and 4 is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. ____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>02042004</u>	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: ____

DETAILED ACTION

1. The abstract of the disclosure is objected to because all numerals are shown without enclose in a parenthesis. Correction is required. See MPEP § 608.01(b).

Drawings

2. The drawings are objected to because "Fig. 8A" should be --Fig. 8B (PRIOR ART)-- ; and "Fig. 8B" should be --Fig. 8A (EMBODIMENT)--; see page 3 of the specification. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. Claims 2-4 are objected to because of the following informalities:

Claim 2, line 16 "is projects further" should be --projects further--,

Claim 3, line 3 "the brake disc" should be --the brake disk--,

Claim 4, line 3 "the brake disc" should be --the brake disk--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (U.S. Patent Number 4,093,043) in view of Karasudani (U.S. Patent Number 4,161,239).

Re-claim 1 Smith disclosed, as shown in fig. 1-3, a disk brake unit comprising at least one piston 32 built into a caliper body 18 having a substantially U-shaped cross section with an outer section 25 and an inner section 24 connected by a bridge section 26, an outer pad 45 attached to the outer section, an inner pad 46 attached to the inner section, and an outer periphery of a brake disk 14 inserted between the outer pad and inner pad wherein on actuation of said piston, said outer pad and inner pad press said brake disk, wherein part of the bridge section projects further inwards than an outer peripheral edge of the piston (see fig. 1 dotted lines passing through below screws 37).

However Smith failed to disclose wherein part of the piston projects beyond an outer peripheral edge of the brake disk to an outer side, the outer pad and inner pad do not project out further than the outer peripheral edge of the brake disk.

Karasudani teaches, as shown in fig. 3, a disk brake wherein part of the piston 4 projects beyond an outer peripheral edge of the brake disk to an outer side, the outer and inner pads 3,3 do not project out further than the outer peripheral edge of the brake disk.

It would have been obvious to one of ordinary skill in the art to have modified the pistons to project beyond an outer peripheral edge of the brake disk to an outer side, and the outer and inner pads do not project out further than the outer peripheral edge of the brake disk into the disk brake unit of Smith, in view of the teaching of Karasudani, is a matter of design choice depending upon the size, capacity, and application of the disk brake unit.

Re-claim 3 Smith disclosed, as shown in fig. 1-3, wherein there are a plurality of pistons, the plurality of pistons being lined up along the outer peripheral edge of the brake disk at specified intervals, with part of the bridge section being caused to project between these pistons.

6. Claims 2 and 4 would be allowable if rewritten to overcome the informalities recited in par. 3 of the office action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Smith (US 4,341,289)

Kawaguchi (US 4,343,380)

Meynier et al. (US 4,606,439)

Iwamoto (US 4,716,994)

Evans (US 4,823,920)

Schenk et al. (US 5,036,960)

Shimura (US 5,277,279)

Anger et al. (US 5,957,245)

Doi et al. (US 6,189,659)

Schorn et al. (US 6,427,810)

Reeves (US 6,478,121)

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariano Sy whose telephone number is 703-308-3427.

The examiner can normally be reached on Mon.-Fri. from 9:00 A.M. to 3:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci, can be reached on 703-308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 3683

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Sy
M. Sy

December 14, 2004



12/16/04

MATTHEW C. GRAHAM
PRIMARY EXAMINER
GROUP 310